UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,527	03/12/2004	Man-Pyo Hong	587-35	8496

28249 7590 04/23/2007 DILWORTH & BARRESE, LLP 333 EARLE OVINGTON BLVD. SUITE 702 UNIONDALE, NY 11553	**EXAMINER** YALEW, FIKREMARIAM A

ART UNIT	PAPER NUMBER
2136	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)
Office Action Summary	10/799,527	HONG ET AL.
	Examiner	Art Unit
	Fikremariam Yalew	2136

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 March 2004*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 2* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a))..

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *03/12/2004*.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   Claims 1-2 have been examined.

Information Disclosure Statement

2.   The information disclosure statement (IDS) submitted on 03/12/2004 is in

compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure

statement is being considered by the examiner.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4.   Claims 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Ko(US

Patent No 6,697,950 B1).

5.   As per claim 1: Ko discloses a method for detecting malicious code patterns in

consideration of control and data flows, wherein: a malicious code pattern is detected by

determining whether values of tokens (variables or constants) included in two sentences

to be examined will be identical to each other during execution of the sentences (See

Fig 2 step 206 and col 2 lines 35 –47,col 6 lines 13-28((i.e. determine whether the

document contains suspect macro operation) and within a macro a specific

operation/statement executed)), and the determination on whether the values of the

tokens will be identical to each other during the execution is made through classification

into four cases: a case where both tokens in two sentences are constants, a case where

one of tokens of two sentences is a constant and the other token is a variable, a case

where both tokens of two sentences are variables and have the same name and range,

and a case where both tokens of two sentences are variables but do not have the same

name and range(See col 3 lines 18-28 and col 5 lines 8-19 and col 6 lines 13-28).

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ko(US

Patent No 6,697,950 B1) and in view of Wagner et al(Intrusion Detection via Static

Analysis 2001 Proceedings of the IEEE Symposium on security and privacy 2001

IEEE).

8.   As per claim 2: Ko discloses claim 1 as recited above. Ko does not explicitly

discloses the method wherein the determination on whether the values of tokens will be

identical during the execution of the sentences is made based on: if both the tokens in

the two sentences are constants, whether relevant token character strings are identical

to each other; if one of the tokens of the two sentences is a constant and the other

token is a variable, whether the relevant token character strings are identical to each

other after the variable is substituted for a constant; if both the tokens of the two

sentences are variables and have the same name and range, whether there are

definitions of the relevant variables in a control flow from a preceding one of the two

sentences to a following one thereof; and if both the tokens of two sentences are

variables but do not have the same name and range, whether there are definitions of

the relevant variables in a control flow from a preceding one of the two sentences to a

following one thereof after the relevant variables are substituted for original variables().

        However Wanger discloses the method wherein the determination on whether

the values of tokens will be identical during the execution of the sentences is made

based on: if both the tokens in the two sentences are constants, whether relevant token

character strings are identical to each other (Section 4.3(the abstract stack model and

Fig 2)); if one of the tokens of the two sentences is a constant and the other token is a

variable, whether the relevant token character strings are identical to each other after

the variable is substituted for a constant(Section 4.3(the abstract stack model and Fig

2); if both the tokens of the two sentences are variables and have the same name and

range, whether there are definitions of the relevant variables in a control flow from a

preceding one of the two sentences to a following one thereof(Section 4.3(the abstract

stack model and Fig 2); and if both the tokens of two sentences are variables but do not

have the same name and range, whether there are definitions of the relevant variables

in a control flow from a preceding one of the two sentences to a following one thereof

after the relevant variables are substituted for original variables(Section 4.3(the abstract

stack model and Fig 2).Therefore it would have been obvious to a person having

ordinary skill in the art the time the invention was made to modify the teaching method

of Wanger within Ko method inorder to perform static analysis on macro viruses (See

Ko 25-26).

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. See PTO 892.

10.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Fikremariam Yalew whose telephone number is

5712723852. The examiner can normally be reached on 9-5.If attempts to reach the

examiner by telephone are unsuccessful, the examiner's supervisor, Moazzami

Nasser,can be reached on 5712738300. The fax phone number for the organization

where this application or proceeding is assigned is 571-272-4195.Information regarding

the status of an application may be obtained from the Patent Application Information

Retrieval (PAIR) system. Status information for published applications may be obtained

from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the

PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to

the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-

9197 (toll-free). If you would like assistance from a USPTO Customer Service

Representative or access to the automated information system, call 800-786-9199 (IN

USA OR CANADA) or 571-272-1000.

Fikremariam Yalew   Art Unit 2136
04/17/07
FA
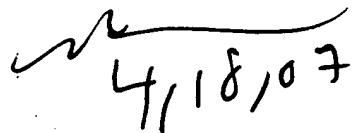   NASSER MOAZZAMI
                                      SUPERVISORY PATENT EXAMINER
                                          TECHNOLOGY CENTER 2100

                                                    4/18/07